

FORMALITIES

A Supplemental Information Disclosure Statement is being filed concurrently with this Response and the reference cited therein is discussed below. The Applicants respectfully request that, the Examiner consider the reference cited before issuance of his next Office Action.

REMARKS

Claims 1-9 are pending in the present application. Claims 1-8 have been rejected under 35 USC § 102(b) and claim 9 has been rejected under 35 USC § 103(a).

The Applicants appreciate the Examiner's thorough examination of the subject application and respectfully request reconsideration of the subject application based on the following remarks.

35 U.S.C. § 102(b) REJECTIONS

The Examiner has rejected claims 1-8 under 35 USC §102(b) as anticipated by U.S. Patent Number 5,511,150 to Beaudet, et al. ("Beaudet" or the "Beaudet Reference"). The Applicants respectfully traverse the grounds for these rejections based on the following remarks.

The system of the present invention displays and informs a user of the permissible length of time before reception of a new job is possible at the interval between jobs. Specifically, with respect to the claims, Claim 1 recites a computing means for calculating "the time at which an interrupt can be made next, based on the designated number of print sets, the current state of printing, the information as to whether an interrupt is permissible." According to the Examiner, the recitation is disclosed in the Beaudet reference at col. 9, lines 7-8; col. 10, lines 1-5; col. 1, lines 30-35; col. 6, lines 60-65; and col. 10, line 3. The Applicants respectfully disagree. Indeed, the Applicants assert that, the passages bear no relationship to a means for calculating "the time at which an interrupt can be made next."

The Beaudet reference discloses a feature of an apparatus wherein a copy job operation is performed without interrupting a current printing job. Here, "without interrupting" means that the printing job is not interrupted while preparation of the copy job is under way. Furthermore, after the preparation of the copy job operation is completed, the printing job proceeds to a temporary interruption. The apparatus of Beaudet also is configured to display the present status of the printing job and an approximate time remaining before completion of the printing job is reached. See, e.g., Beaudet, Fig. 4D. In other words, Beaudet discloses a system wherein a new job can be prepared while current job operation is being carried out, and, subsequently, initiation of the new job is received when the preceding job has been finished.

More specifically, according to Beaudet,

Assume that clock 19 is associated with the RIP's master processor unit 30 and that this processor is programmed to allow a key operator to designate begin and end times of operation of the copier/printer apparatus in the CJLM print mode of operation. In response to a commencement of this mode, inputs from the copier OCP 28 are either ignored or a timed message of say 5 seconds duration may be displayed that states "Copier disabled. Call Key Operator to enable." accompanied by an auditory message or "beep" being generated.

Id., col. 6, lines 58-67 (Emphasis added). The passage says nothing about using the current state of printing to calculate the time at which an interrupt can next be made. Indeed, the passage merely discloses that when the apparatus is in a "copy-job lockout mode" (CJLM), wherein the copier/printer is locked out of operation for a designated period of time, anyone trying to use the apparatus will receive a "copier disabled" message. Moreover, CJML is a lock-out, non-printing mode. It does not define a "current state of printing". Accordingly, the Applicants respectfully maintain that, Beaudet does not teach, mention or suggest using the current state of printing to calculate the time at which an interrupt can be made.

Beaudet also provides the following,

Further modifications may include allowance of some limited interrupt capability by a walk-up user for making copies, wherein when the printer is in its CJLM print mode and an interrupt button is pressed, the microcontroller 52 determines when sufficient memory is available in the JIB 48 for say one or only a few pages of a scanned-in document sheet. The RIP 16 is commanded to hold up sending further jobs to the JIB until this one copy job is done. A display may be provided to inform the walkup user that the printer is only available for a limited type interrupt and that scanning of the copy job will be delayed for say a specified time quantified from an estimate to complete a current print job. The copier/printer may be programmed to analyze the times and frequencies of such limited interrupt requests and adaptively control the copier/printer to determine the times of day for setting the beginning and end of the CJLM print mode; in this regard, see U.S. Pat. No. 5,194,895.

Id., col. 9, line 61 to col. 10, line 5 (Emphasis added). Here again, Beaudet is concerned with a non-printing, CJLM period and not a printing period. Indeed, the feature purports to allow a user to override the lock-out for a "limited type interrupt." There is nothing in Beaudet that teaches, mentions or suggests using permissible interrupts to calculate the time at which an interrupt can be entered.

Claim 2 recites a computing means for calculating "the permissible termination time which allows for an interrupt job, based on the designated number of print sets, the current state of printing, the information as to whether an interrupt is permissible." For the same reasons provided above, the Beaudet reference does not teach, mention or suggest using current state of printing or the information as to whether an interrupt is permissible to calculate "the permissible termination time."

Japanese Laid-Open Patent Application Publication Number Hei 09-083743

The unexamined laid-open Japanese patent application Hei 09-083743, which is being filed with a Supplemental Information Disclosure Statement concurrently with this Response, discloses a system wherein the remaining time is displayed as the time until a copy job can be started by switching to a copy mode after the previously

received print job has been terminated, since the system is performed with priority to the printing job. This feature differs from the present invention in which waiting time until a new job is possible to be received is displayed, by interrupting the print job in a predetermined manner, when request of interruption is transmitted during a job performance.

It is respectfully submitted that, claims 1-8 satisfy all of the requirements of 35 U.S.C. 100, et seq., especially § 102(b). Accordingly, claims 1-8 are allowable. Moreover, it is respectfully submitted that the subject application is in condition for allowance. Early and favorable action is requested.

35 U.S.C. § 103(a) REJECTIONS

The Examiner has rejected claim 9 under 35 USC §103(a) as being made obvious by Beaudet in view of U.S. Patent Number 5,327,487 to Brown, et al. ("Brown" or the Brown Reference"). The Applicants respectfully traverse the grounds for this rejection based on the following remarks.

The deficiencies of the Beaudet reference have been described above in our discussion of the 102(b) rejections. Further, the Brown reference cannot make up for these deficiencies because the Brown reference does not teach, mention or suggest using the current state of printing or the information as to whether an interrupt is permissible to calculate the time at which an interrupt can be made next or the permissible termination time which allows for an interrupt job.

It is respectfully submitted that, claim 9 satisfies all of the requirements of 35 U.S.C. 100, et seq., especially § 103(a). Accordingly, claim 9 is allowable. Moreover, it is respectfully submitted that the subject application is in condition for allowance. Early and favorable action is requested.

If for any reason a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge or credit Deposit Account No. **04-1105.**

Respectfully submitted,

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